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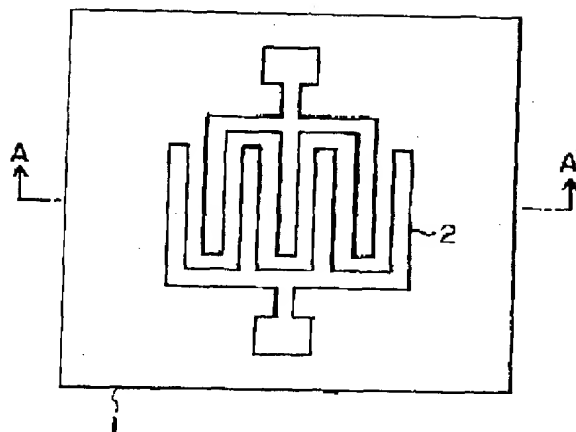
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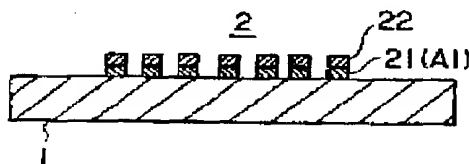
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TITLE : LOVE WAVE-TYPE SURFACE
 ACOUSTIC WAVE DEVICE

(a)



(b)



ABSTRACT : PROBLEM TO BE SOLVED: To reduce cost by providing a Love wave-type surface acoustic wave by using a comparatively inexpensive base metal with large specific gravity, such as Ta(tantalum), W(tungsten) and Pd(palladium), instead of noble metal such as gold.

SOLUTION: An interdigital electrode(IDT electrode) 21 of a first layer made of Al(aluminum) is formed on a rotary Y cut-X transmission LiNbO_3 piezoelectric substrate 1. Then, an IDT electrode 22 of a second layer formed of Ta, W or Pd is formed on the electrode with a prescribed film thickness. The IDT electrode 21 of the first layer of Al is formed on -10° to $+50^\circ$ rotary Y cut LiTaO_3 piezoelectric substrate 1, and the IDT electrode 22 of the second layer of Ta, W or Pd is formed on the electrode with a prescribed thickness. The both IDT electrodes are made into two layers. The layer below aluminum is a layer, where electric resistance is lowered and the upper layer formed of Ta, W or Pd is the layer formed making the Love-wave and it can control the film thickness more easily as compared to gold.

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